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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,952	06/24/2003	Brandon R. Bray	MSFT-1650/302481.1	1053

41505 7590 02/06/2007
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EXAMINER

ANYA, CHARLES E

ART UNIT	PAPER NUMBER
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2194

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/602,952

Applicant(s)

BRAY ET AL.

Examiner

Charles E. Anya

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3/MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/17/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-23 and 25-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-23 and 25-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

1. Claims 1,3-23 and 25-35 are pending in this application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1,4,7-13,15,18-23,25,29-31,34 and 35 are rejected under 35**

U.S.C. 102(e) as being anticipated by U.S. Pub. No. 20030018681 A1 to

Subramanian et al.

4. As to claim 1, Subramanian teaches a method of validating and dispatching an event (figures 2/4), comprising: receiving an event (“...receives an exception...” page 2 paragraph 0025); determining an exception handler for the event/determining if the exception handler is valid by comparing the exception handler to a list of valid exception handlers (“...determines if...” page 2 paragraph 0025, figure 6 Exception Handler

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Selector 52 "...matches..." page 2 paragraph 0032) and otherwise determining that the exception handler is invalid ("If there is no matching low level exception handler...terminates..." page 2 paragraph 0033, "If no frame-based handler can be found...termination..." page 3 paragraph 0045); and executing the exception handler if the exception handler is valid ("...dispatches...resolves..." page 2 paragraph 0025, page 2 paragraph 0032).

5. As to claim 4, Subramanian teaches the method of claim 1, further comprising retrieving a list of valid exception handlers from a storage device and comparing the exception handler to the list of valid exception handlers in determining if the exception handler is valid ("...look up table..." page 2 paragraph 0025, "...local database..." page 3 paragraph 0038).

6. As to claim 7, Subramanian teaches the method of claim 1, further comprising, if the exception handler is valid, determining whether the exception handler handles the event, and if so, executing the exception handler, and otherwise, retrieving a second exception handler from information on a stack and continuing processing with determining if the second exception handler is valid (figure 4 (Step 44) page 2 paragraph 0029).

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7. As to claim 8, Subramanian teaches the method of claim 1, further comprising terminating the method if the handler is invalid (figure 4 "...terminate..." page 2 paragraph 0029, figure 6 "...terminate..." page 2 paragraph 0032).

8. As to claim 9, Subramanian teaches the method of claim 1, further comprising generating an error message if the handler is invalid ("...log the error..." page 3 paragraph 0046).

9. As to claim 10, Subramanian teaches the method of claim 1, further comprising, if the exception handler is valid, verifying other data for the event (page 4 paragraph 0049/0050).

10. As to claim 11, Subramanian teaches the method of claim 10, wherein the other data comprises pointer data (page 4 paragraph 0049/0050).

11. As to claims 12,15,18-22, see the rejection of claims 1,4 and 7-11 respectively.

12. As to claims 23 and 25, see the rejection of claims 1 and 4 respectively.

13. As to claims 29-31, see the rejection of claims 7-9 respectively.

14. As to claims 34 and 35, see the rejection of claims 10 and 11 respectively.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. **Claims 3,5,14,16,26,27 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 20030018681 A1 to Subramanian et al. in view of U.S. Pat. No. 5,628,016 to Kukol.**

17. As to claim 3, Subramanian is silent with reference to the method of claim 2, further comprising one of receiving and generating the list of valid exception handlers.

Kukol teaches the method of claim 2, further comprising one of receiving and generating the list of valid exception handlers (“...establish a handler...” Col. 16 Ln. 15 – 59, “...constructing...” Col. 20 Ln. 36 – 57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system Subramanian with the teaching of Kukol because the teaching of Kukol would improve the system of Subramanian by providing

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a uniquely efficient, portable and flexible implementation of exception handling (Kukol Col. 16 Ln. 15 –23).

18. As to claim 5, Kukol teaches the method of claim 1, further comprising generating a list of valid exception handlers by compiling code into at least one of an object file and an image (figure 1C Col. 8 Ln. 62 – 67, Col. 9 Ln. 1 – 16).

19. As to claim 14, see the rejection of claim 3 above.

20. As to claims 16 and 26, see the rejection of claim 5 above.

21. As to claim 27, Subramanian teaches the system of claim 26, further comprising a storage device that store the list of valid exception handlers (“...look up table...” page 2 paragraph 0025, “...local database...” page 3 paragraph 0038).

22. As to claim 32, Kukol teaches the system of claim 23, further comprising a linker that creates an image based on at least one object file received from at least one of a compiler and an assembler, and provides the image to the exception dispatcher system (figure 1C Col. 8 Ln. 62 – 67, Col. 9 Ln. 1 – 16).

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23. Claims 6,17 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 20030018681 A1 to Subramanian et al. in view of U.S. Pub. No. 20020169999 A1 to Bhansali et al.

24. As to claim 6, Subramanian is silent with reference to the method of claim 1, further comprising compiling code to produce an executable that is marked with an identifier indicating that the executable is safe with respect to a list of valid exception handlers.

Bhansali teaches the method of claim 1, further comprising compiling code to produce an executable that is marked with an identifier indicating that the executable is safe with respect to a list of valid exception handlers (figure 14 Handler Designation 1408 page 12 paragraphs 0163/0164).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Subramanian with the teaching of Bhansali because the teaching of Bhansali would improve the system of Subramanian by providing a process for identifying an appropriate exception handler for handling an exception (Bhansali page 12 paragraph 0163).

25. As to claims 17 and 28, see the rejection of claim 6 above.

26. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pub. No. 20030018681 A1 to Subramanian et al. in view of U.S. Pat. No. 5,628,016

to Kukol as applied to claim 32 above, and further in view of U.S. Pub. No. 20020169999 A1 to Bhansali et al.

27. As to claim 33, Kukol and Subramanian are silent with reference to the system of claim 32, wherein the linker produces an executable that is marked with an identifier indicating that the executable is safe with respect to a list of valid exception handlers.

Bhansali teaches the system of claim 32, wherein the linker produces an executable that is marked with an identifier indicating that the executable is safe with respect to a list of valid exception handlers (figure 14 Handler Designation 1408 page 12 paragraphs 0163/0164).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kukol and Subramanian with the teaching of Bhansali because the teaching of Bhansali would improve the system of Kukol and Subramanian by providing a process for identifying an appropriate exception handler for handling an exception (Bhansali page 12 paragraph 0163).

Response to Arguments

Applicant's arguments with respect to claims 1-35 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Anya whose telephone number is (571) 272-3757. The examiner can normally be reached on M-F (8:30-5:00).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner
Art Unit 2194

cea.


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SUPERVISORY PATENT EXAMINER